

VGW Tutorial Index



The **VAR Grade for Windows** tutorials are designed for use with the sample classes SampleA, SampleB, SampleC, and SampleD. The tutorials will show you how to do a variety of different procedures in the program. They are divided into three general categories as seen below. If you are new to VGW, you might want to start with the beginning tutorials. As you become more experienced, try the standard and advanced tutorials.

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Adding students

There are several ways to add students to a class. This tutorial will show you three different methods. First, you can quickly enter lists of students.

Quick entry of students

- Select "Edit" from the **Main Menu**.
- Select "Quick Entry of students" from the Edit menu. The next item, "Quick entry of students and IDs", allows quick entry of both names and IDs.
- If the hint screen appears, read it, then select "OK".
- If you use more than one section of students, you need to select a section for the new students. Move to a student in the section by using the scroll, then click the left mouse button on the student. Then, click the left mouse button on the "Select" button. Last, select "OK". An alternative is to select "Next free", then "OK". This will select the next unused section.
- A dialog appears, with space for entering the new name at the bottom of the dialog. Type in the name. Then press the <Enter> key or use the mouse to select the "Add" button.
- Continue entering the names by typing in a new name, then pressing <Enter> or selecting the "Add" button until you are finished. Then, select "OK".
- The students will have been added to the class.

Adding from the "Class Data Entry" window

There are two methods from this window. For these to work, make sure that you can enter the field for student names by clicking the mouse on a name. If the cursor doesn't move to the cell, select "Edit Options" on the Main Menu. Next, click the mouse on "Prevent alteration of student names". The field should be unchecked.

Make sure you are on the Class Data Entry window by selecting "Edit" on the Main Menu, then select "by Section or class".

- Move to the place where you want the name added by using the up and down arrow keys or by using the mouse and clicking it on the correct row. Next, select the "Ins row" button above the spreadsheet by clicking on it with the left mouse button. An empty row appears on the row. Type in the name.
- This method adds an empty row at the end of the class. Select the "Add row" button above the spreadsheet by clicking on it with the left mouse button. An empty row appears at the bottom of the class, and the cursor is moved to that row. Type in the name.

Adding from the "Individual Data Entry" window

Make sure you are on the Class Data Entry window by selecting "Edit" on the Main Menu, then select "by Individual".

- Select "Insert" on the menu for editing individual students. A new student is added. Type in the name.

See also

Importing students

Entering data

There are two major places where you can enter student data: by the whole class or a section, and by individual student.

Entering data by class or section

- Select "Edit" from the Main Menu.
- Select "by Section or class" from the Edit Menu. The screen shows a list of student names (or IDs) down the left side of the window, with columns for entering other data, such as section numbers, database items, task scores, and attendance items. You can also press <F7> to get to this window.
- There are two ways to move around the screen. First, use the mouse to move the mouse cursor to a **cell**, then click the left mouse button on the cell. Second, you can use the arrow keys (up, down) and <tab> keys to move between cells.
- Each type of data has different requirements when entering data. For example, to enter grades, number tasks accept numbers, while letter tasks can accept letters. When entering number grades, you can also use the "+", "-", "*", "/", and "=" keys calculator style to enter the score. For example, you can type "5+5=", and "10" will be pasted into the cell.
- If you are entering grades, when you move to another cell the grades are automatically recalculated.
- If you click the right mouse button, a menu will pop up with a variety of quick options. The options change with the type of cell. For example, if you click the right mouse button on a name, the menu lists "Edit by individual", "Tasks", "Missing assignments", "Individual plot", "Attendance", "Missing days", and "Summary". The last three only appear if any attendance days have been defined. Edit by individual will close this screen, and open a window, described below, for entering data for that student. The other options use the current list of items for that screen to display data. If you click the right mouse button on a task, a different list appears: "View definition" (of the that task), "Plot" (histogram for that task), "Individual vs Class plot", "Write scores" (for all students on that task), "Missing assignments", and "Student". Selecting "Student" will show the menu that appeared when clicking on the name. In short, the right mouse button is a quick way to view data.
- There is a row of buttons along the top of the window. These can be used to change the window, print the data in it, or to enter or change data:

Button	Action
"Add row"	Add a student.
"Ins row"	Add a student.
"Del row"	Remove a student.
"Find row"	Pick from a list of students, then will move to that student.
"Locate"	Locate a particular value.
"Fill column"	Fill empty cells in a column with a value
"Section"	Select a different section to edit.
"View"	Change which columns are seen on the screen. A menu will pop up that lets you select a variety of options. In addition, you can change the font or the width of the columns from this button.
"Print"	Prints the current list of students and columns.
"Exit"	Closes the window.

Note: Several of the items from the Main Menu will cause a redrawing of the window.

Entering data by individual

- Select "Edit" from the Main Menu.
- Select "by Individual" from the Edit Menu. The screen shows the student name as the window name. The student data is listed in a column with rows for entering data such as section numbers, database items, task scores, and attendance items. You can also press <F8> to get to this window.
- There are two ways to move around the screen. First, use the mouse to move the mouse cursor to

a **cell**, then click the left mouse button on the cell. Second, you can use the arrow keys (up, down) and <tab> keys to move between cells.

- Each type of data has different requirements when entering data. For example, to enter grades, number tasks accept numbers, while letter tasks can accept letters. When entering number grades, you can also use the "+", "-", "*", "/", and "=" keys calculator style to enter the score. For example, you can type "5+5=", and "10" will be pasted into the cell.
- If you are entering grades, when you move to another student the grades are automatically recalculated.
- If you click the right mouse button, a menu will pop up with a variety of quick options. The options change with the type of cell. For example, if you click the right mouse button on a name, the menu lists "Edit by class", "Tasks", "Missing assignments", "Individual plot", "Attendance", "Missing days", and "Summary". The last three only appear if any attendance days have been defined. Edit by individual will close this screen, and open a window, described above, for entering data for a section or class. The other options use the current list of items for that screen to display data. If you click the right mouse button on a task, a different list appears: "View definition" (of the that task), "Plot" (histogram for that task), "Individual vs Class plot", "Write scores" (for all students on that task), "Missing assignments", and "Student". Selecting "Student" will show the menu that appeared when clicking on the name. In short, the right mouse button is a quick way to view data.
- There is a second menu at the top of the window. The menu items can be used to change the window, print the data in it, or to enter or change data:

<u>Button</u>	<u>Action</u>
"File"	Print the student data, or change the font. Also exit the window from this menu.
"Edit"	Find a value or locate a student. Also, you can change students from this menu.
"View"	Change which columns are seen on the screen. A menu will pop up that lets you select a variety of options.
"Recalc"	If automatic recalculations are turned off, forces recalculating grades.
"Insert"	Adds a new student.
"Delete"	Removes the current student.
"left arrow"	Moves to the previous student.
"right arrow"	Moves to the next student.

Note: Several of the items from the Main Menu will cause a redrawing of the window.

Printing class data

You can print tasks, attendance, and database items in columns, with the student names and/or IDs in the left column, then the student data in the other columns. There are several choices on the Main Menu, listed below, that let you print the data. In all but one case, they bring you to the same window.

- Select "Write" from the Main Menu.
- Select "by Section or class" from the Write menu.
- Select "Tasks", "Missed assignments", "Database items only", or "Attendance".
- If you selected "Attendance", select "Attendance", "Missing days", "Summary", "Brief Summary", or "Totals". These are various ways to print attendance data.
- Select the items to display. You select tasks, database items, or attendance days to display. Only those you select are shown, and they are shown in the order of selection. For summaries of attendance, all the attendance days are used.
- If you selected attendance totals, you are asked whether to total the numbers separately or together. If separately, you see a listing of each attendance day and the number of students in each attendance category. Otherwise, all the days are lumped together.
- After the data is displayed, you can change almost any aspect of the display. The menu items are described below:

<u>Menu item</u>	<u>Action(s)</u>
File	Prints the data, changes the font, or allows you to change display options such as decimals to use in printing grades.
Tasks	Allows you to display task scores or missing assignments.
Sections	Allows you to select which sections to display.
Attendance	Allows you to select the attendance days, missing days for students, summaries and brief summaries of attendance by students.
DB	Allows you to select database items to display, and to "filter" students through a database item. If you filter students, only those matching particular database values are shown.
Subjects	Allows you to specify more classes (subjects) to display. This allows you to print data from more than one class in one report.
View	Affects how the name and ID are displayed.
Output terms	Allows you to change the titles such as "Class" and "Date".

Note: The attendance totals window lacks many of these options (Tasks, DB, View, and some Attendance options).

- To exit this window, select "File", then "Exit".

Printing one student

You can print tasks, attendance, and database items for each student. The data for each student is printed on a page, with the student name and /or ID on the top, with the data printed in a column below. There are several choices on the Main Menu, listed below, that let you print the data. In each case, they bring you to the same window.

- Select "Write" from the Main Menu.
- Select "by Name" from the Write menu.
- Select "Tasks", "Missed assignments", or "Attendance".
- If you selected "Attendance", select "Attendance", "Missing days", "Summary", "Tasks and attendance", or "Tasks and summary". These are various ways to print attendance data.
- Select the student(s) to display. To do this, you can either double click on the name of the student, or single click on the name and click on the "Select" button. You can also display all the students by selecting "Select all". To not print a student that is already selected, double click on the student's name on the bottom list, or click on the name and click on "Reject".
- Select the items to display. You select tasks or attendance days or both to display. Only those you select are shown, and they are shown in the order of selection. For summaries of attendance, all the attendance days are used.
- If you wish to enter comments about your students, select "Comments". You then enter the comments to be displayed. When finished, select "OK". The comments will be displayed after all other data for the student. These will stay there until you change the students or exit the screen. They are *not* permanent.
- After the data is displayed, you can change almost any aspect of the display. The menu items are described below:

<u>Menu item</u>	<u>Action(s)</u>
File	Prints the data, changes the font, or allows you to change display options such as decimals to use in printing grades.
Tasks	Allows you to display task scores or missing assignments, or task scores in combination with attendance or attendance summaries.
Student	Allows you to select which students to display. This will delete the current comments, if they have been entered.
Attendance	Allows you to select the attendance days, missing days for students, or summaries of attendance by a student.
DB	Allows you to select database items to display along with the task or attendance data.
Subjects	Allows you to specify more classes (subjects) to display. This allows you to print data from more than one class in one report.
View	Affects how the name and ID are displayed.
Output terms	Allows you to change the titles such as "Class" and "Date".

- To exit this window, select "File", then "Exit".

Plotting

Grades from your class can be displayed as histograms or pie charts.

Plotting scores

- Select "Plot" from the Main Menu.
- Select "Histogram" from the Plot menu.
- Select the task to plot. You do this by double clicking on the task, or by clicking on it and then clicking on the "Select" button.
- Select "OK".

Changing the display

There are several types of plots you can display, and ways that you can alter the appearance of the chart.

- To change the type of plot, select "Chart" on the chart menu. You then select one of the six types of charts: 3D bar, 2D bar, 3D pie, 2D pie, line, and tape charts. Each of these displays the same data in different ways. Note that pie charts work well only if you have a few categories.
- You can select a different task to plot by selecting "Task", then the new task to display.
- You can change the appearance of the chart with several options:

<u>Select</u>	<u>Action</u>
Select, then Chart labels	Change the names of the X and Y axes, and the chart title.
Select, then Range	Change the high and low scores to plot.
Select, then Lines on chart	Changes whether vertical lines are also shown on the chart.
Select, then Show statistics	Changes whether to display the mean, median, and standard deviations.
Output terms	Changes other titles such as "Mean", and "Median".
Chart, then Font for chart	Changes the font for the chart.

- You can change the students used for the chart by selecting "Select", and then "Different students" or "Ignore students". Different students allows you to specify exactly which students to display, while ignoring students prevents certain students from being used for any plots or statistics.
- You can print the chart by selecting "Chart", then "Print chart". You can also copy the chart to the clipboard by selecting "Copy". The chart can then be imported into another program, such as a word processor.
- You can print the data used for the chart by selecting "Chart", "Print chart data". You can also change the font used for the data by selecting "Font for data". The data is printed in two columns. One column is the sorted order of the students and the scores, while the other is the numerical order of the students and scores, from high to low score.
- You exit the chart by selecting "Chart", then "Exit". The next time you plot a histogram, the same chart type that you selected is used, so if you viewed a line chart this time, next time that is the chart that will be shown first.

Database items

You can define up to 200 database items on a student. These are items that are not grades or attendance, but include anything else. Examples of database items are addresses, genders, ages, years in school, etc. There are six different database types.

Defining database items

- Select "DB" from the Main Menu.
- Select "Define" from the DB menu.
- Select one of the six database types (string, memo, integer, date, character, and boolean).
- Enter a number for the database item. You can either type in a number, select it by clicking the left mouse button on the item with the number you want and then clicking on "Select", or clicking on "Next free". If you select a number that already has a database item, that item and any with higher numbers are moved back.
- You are then asked for the name of the item. If you are defining a string or a memo item, you are also asked for the maximum length of the item. Strings can have up to 40 characters, while memos can have up to 250 characters. If you are defining a character field, you enter up to 15 allowed characters (character items are one character long, selected from the characters that you list).
- Select "OK".

Note: Database items can be moved, altered, and removed. See the manual for further details.

Seating charts

Up to two seating charts can be made for each group of students (section) in your class. This allows you to have a chart for a normal class, and one for an activity room or lab. You can move the desks around so that the seating matches your room, even if the seats are circular or irregularly spaced.

Defining seating charts

- Select "Attendance" from the Main Menu.
- Select "Seating charts" from the Attendance menu.
- Select "View" from the Seating charts menu. Seating chart 1 will appear for the first section of students. If no seating chart had already been defined, a new one is automatically defined for you.
- To move the desks, move the mouse cursor to the desk you want to move, then press the left mouse button. Keep the button down, and move the desk to its new location. While you are moving the desk, the old one stays put, while a new one moves with the cursor. Both the old and the new desks are colored differently than the desks that aren't being moved. Then release the mouse button. You can move both the students and the instructor's desk. This lets you define almost any seating chart.

Other seating charts and moving students

- To view and alter seating chart 2, select "Chart", then "2nd chart".
- To do a seating chart with other sections, select "Select", then "Section". Next, select the section you want by clicking the left mouse button on a student in the section, then "Select" and "OK".
- After the desks are set up, you can move the students between them three easy ways, and one hard one. The easy ones are to place students alphabetically, reverse alphabetically, and randomly around the desks. To do these, on the chart menu select "Select", then "Alphabetize", "Reverse alphabet", or "Randomly". The hard way is to move the desks just like defining a new chart. However, the hard way gives you the most flexibility.

Seating chart appearance and printing

- To print the chart, select "Chart", then "Print chart". You can, if you desire, change the font or font size before printing on the same Chart menu.
- You can copy a seating chart to the clipboard by selecting "Chart", then "Copy". You can then paste the chart into other programs.
- There are several things you can do to alter the appearance of the chart. First, you can change the labels by selecting "Select", then "Chart labels". There are two labels (Instructor and the chart title). Second, you can select "Select", then "Lines on chart" and/or "Shadows on chart". Shadows only appear if lines are also selected. Third, you can change how the names are shown on the desks by selecting "View". You can show names or IDs. Last, you can change some terms by selecting "Output terms".
- You can do attendance with a seating chart facsimile by selecting "Attendance".

Changing grading systems

Just about any grading system can be defined in VGW. You can have up to 50 different grade names, with up to 3 characters per grade name. It is usually best to define a grading system when you first make a new class.

Defining a grading system

- Select "Grade" from the Main Menu.
- Select "Grade names and values" from the Grade Menu.
- There are several predefined grading systems that you can select. If you select these, the program will automatically be set up with that system. If you wish to design your own grading system, select "Define your own system".

Defining your own grading system

- You can have up to 4 grading systems in each class, so enter a number between 1 and 4. An example of two grading systems are an A to F and a Pass/Fail system. In most cases, you want to enter a 1. Next, you need to enter the maximum grade value. In an A to F system, an A is usually worth 4 points, and the maximum points is 4. People who mix letter and number grades usually want to enter a 100 for the maximum value. Last, enter the name for an unentered grade (e.g., "I" for incomplete).
- Next, you enter the grade names and values for each grade. If you have more than one grading system, you should enter them for each system. The grade values should be in numerical order.
- If you use more than one grading system, you need to select a database item to be used for selecting the student grading system. VGW needs to know which grading system to select for a student, and uses a database item for that information. If you do not assign a database item, all students will use grade system 1.

Grade cutoffs

Grade cutoffs are the minimum points necessary to obtain particular grades. They differ from grade values in that grade values are the points to use for that grade when calculating grades. For example, an A is usually worth 4.0 points (grade value), but you need 90% for an A (grade cutoff).

Defining grade cutoffs

- Select "Grade" from the Main Menu.
- Select "Grade cutoffs" from the Grade menu.
- Select "Assign cutoffs" from the Grade cutoffs menu.
- You now need to decide if the cutoffs you enter are in percentages or absolute points. In most cases, you want to use percentages.
- You then enter the cutoffs. The grade names for each grading system are shown. The cutoffs should be in numerical order, from the highest to the lowest. If you don't enter a value for the cutoff, no student will receive that grade.
- Last, you enter the maximum possible grade.

Note: In many cases, you want the grade cutoffs and the grade values to match. To do so, make sure the box asking this is checked when defining grade cutoffs or grade values.

Assigning final grades

Final grades can either be calculated automatically or assigned by you. To have them calculated automatically, you need to define a grading system before defining a Final task.

Assigning final grades

- Select "Grade" from the Main Menu.
- Select "Assign final grades" from the Grade menu.
- Select the task to use for assigning final grades. To select the task, click the left mouse button on the task, then click on "Select". You can also select it by double clicking on the task. If the task is a final task, the grades and cutoffs are assigned to the students. If the task isn't a final task, the grades are listed, and can be printed, but no permanent record is kept.
- You next enter grade cutoffs. If the task already has cutoffs, or if you have defined grade cutoffs for the class, they are listed. You can change them as you want. Note that the grade cutoffs must be in numerical order, from highest to lowest. If you leave a cutoff blank, nobody will earn that grade.
- The grades are assigned and shown. After the grades of individual students are listed the numbers of students with each grade is listed. You can now modify the cutoffs by selecting "Cutoffs" from the window menu.
- You can change the appearance of the grades by selecting "View" to change how names and IDs are printed, or "Output terms" to change the titles and other text. If you select "File", then "Options", you can change things like the number of decimals to display.
- You can print the grades by selecting "File", then "Print". You can change the font before printing by selecting "File", then "Font".

Plotting statistics

Statistics can be calculated and plotted on a simple chart.

Class vs Individual plot

- Select "Plot" from the Main Menu.
- Select "Class vs Individual" from the Plot Menu.
- Select the task to use for the plot. To select the task, click the left mouse button on the task, then click on "Select". You can also select it by double clicking on the task.
- Select a student. If no student is chosen, the plot will be shown, but, obviously, no individual student is shown. To select a student, click the left mouse button on the name, then click on "Select". You can also select it by double clicking on the name.
- The plot is shown. The possible range is the line chart. The range of student scores is a thick dark band. The **mean**, **median**, and **standard deviations** (+1, -1) are shown, as well. If you selected a student, the student is shown below the chart, with an arrow indicating the student's score.
- If you click the left mouse button on the chart, the numbers used for the plot are shown in a box. If you click the right mouse button, the student's score is shown.
- You can change the student view by selecting "Select", then "View student".
- You can change which students are used for calculating the statistics by selecting "Select", then "Select students" or "Ignore students". Select students lets you pick exactly which students to use, while ignore students just removes certain students from all statistical calculations or plots.
- The task viewed can be changed by selecting "Task".
- You can change the appearance by selecting one of these menu items:

<u>Select</u>	<u>Action</u>
Select, then Chart labels	You can change the titles for this chart
Select, then Range on chart	Turns on or off whether to show the range in a dark, thick bar.
Select, then Show statistics	Turns on or off whether to show the mean, median, and standard deviations on the chart.
View	Affects how the name or ID is shown for the student.
Output terms	You can change the titles for all charts.

- You can print the chart by selecting "Chart", then "Print chart". You can change the chart font by selecting "Chart", then "Font for chart".
- You can print the data used for the chart. Select "Chart", then "Print data". The data is all the students used for the plot, as well as the statistical values.
- You can copy the chart to the clipboard by selecting "Chart", then "Copy". This allows you to import the chart into another application.

Descriptive statistics

An alternative are the descriptive statistics plots. They are better at listing all the statistical data, but don't look as nice.

- Select "Grade" from the Main Menu.
- Select "Descriptive statistics" from the Grade menu.
- Select the tasks to use for the calculations. To select a task, click the left mouse on the task, then click on "Select". You can also select the task by double clicking on it.
- The statistics and a simple chart are shown. Besides means, medians, and standard deviations, other values shown are the number of students in particular score intervals and the mode.
- To change which sections are used for the calculations, select "Sections".
- To change the titles, select "Output terms".
- To change the tasks for the calculations, select "Task".
- To print the chart, select "File", then "Print". You can change the font before printing by selecting

- "File", then "Font".
- To exit, select "File", then "Exit".

Correlating tasks

The students grades for two tasks can be plotted against each other. The correlation of the scores on the two tasks are calculated. This is done to determine whether one or both of the tasks was poorly designed. A low correlation suggests that there were no consistently good or bad students. This may be the case, but should at least be examined.

Correlation plot

- Select "Plot" from the Main Menu.
- Select "Correlate two tasks" from the Plot Menu.
- Select the tasks to use for the plot. You first select the one to be plotted on the X-axis, then the one for the Y-axis. To select the task, click the left mouse button on the task, then click on "Select". You can also select it by double clicking on the task.
- You are shown the plot. A line is shown that represents the correlation. Ideally, it should rise from the lower left to the upper right. If the line is markedly different from this, there may be a problem with one or both tasks.
- Clicking the left or right mouse buttons on the chart cause the correlation coefficient (slope of the line) to be shown. Clicking the left button on a point shows the student, while clicking the right button on the point will show the student's scores on the two tasks.

Changing the chart

- You can pick new tasks by selecting "Tasks", then "X-axis task" or "Y-axis task".
- You can select which students to plot by selecting "Select", then "Sections", "Different students", or "Ignore students". Selecting sections will let you plot different sections separately. Selecting different students lets you select exactly which students to use. Ignoring students eliminates them from all statistical calculations and plots.
- You can change the appearance by selecting one of these menu items:

<u>Select</u>	<u>Action</u>
Select, then Chart labels	You can change the titles for this chart
Select, then X-axis range	Lets you select the high and low scores to plot for the x-axis task.
Select, then Y-axis range	Lets you select the high and low scores to plot for the y-axis task.
Select, then Lines on chart	Turns on or off whether to show vertical and horizontal lines on the chart.
Select, then Show statistics	Turns on or off whether to show the correlation line on the chart.
View	Affects how the name or ID is shown for the student.
Output terms	You can change the titles for all charts.

- You can print the chart by selecting "Chart", then "Print chart". You can change the chart font by selecting "Chart", then "Font for chart".
- You can print the data used for the chart. Select "Chart", then "Print data". The data is all the students and the X- and Y-axis task scores, as well as the statistical measures.
- You can copy the chart to the clipboard by selecting "Chart", then "Copy". This allows you to import the chart into another application.

Plotting student progress

A series of scores for a student can be plotted. The plot can give you a better idea of whether the student is improving or getting worse on the assignments.

Individual progress plot

- Select "Plot" from the Main Menu.
- Select "Individual progress" from the Plot Menu.
- Select the student to use for the plot. To select a student, click the left mouse button on the name, then click on "Select". You can also select it by double clicking on the name.
- Select the tasks to use for the plot. You first select the one to be plotted on the X-axis, then the one for the Y-axis. To select the task, click the left mouse button on the task, then click on "Select". You can also select it by double clicking on the task.
- You are shown the plot. There are two lines besides the bars. These are the mean (dashed horizontal line), and the trend (solid line).
- Clicking the right mouse button on the chart causes the high, low, mean, and trend to be shown. Clicking the left button causes the trend to be shown. Clicking the left button on a point shows the score for that item.

Changing the chart

- You can pick new tasks by selecting "Tasks".
- You can select which student to plot by selecting "Select", then "Student".
- The initial plot shows total points. You can plot several other ways, as well. To do so, select "Select", then "Total points", "Percentages", "**Percentiles**", "Standard deviation" (**z scores**), "**T scores**", or "**Student t scores**". If your scores vary a lot by total points, the total points plot will be fairly meaningless. The others all scale the scores some way.
- You can change the appearance by selecting one of these menu items:

<u>Select</u>	<u>Action</u>
Chart, then 3D bar	Shows a 3D bar chart.
Chart, then 2D bar	Shows a 2D bar chart.
Chart, then Line chart	Shows a line chart.
Chart, then Tape graph	Shows a tape graph.
Select, then Chart labels	You can change the titles for this chart
Select, then Lines on chart	Turns on or off whether to show vertical and horizontal lines on the chart.
Select, then Show statistics	Turns on or off whether to show the correlation line on the chart.
View	Affects how the name or ID is shown for the student.
Output terms	You can change the titles for all charts.

- You can print the chart by selecting "Chart", then "Print chart". You can change the chart font by selecting "Chart", then "Font for chart".
- You can print the data used for the chart. Select "Chart", then "Print data". The data is the student and all the task scores used to print the chart.
- You can copy the chart to the clipboard by selecting "Chart", then "Copy". This allows you to import the chart into another application.

Sections

A class can be divided into groups of students called sections. The two major reasons you would use sections are for very large classes, where students are typically separated into sections for discussions or labs, and if you teach two or more identical classes (especially common in junior and senior high schools).

Using sections also allows you to compare and contrast the sections, as you can print or plot all the sections, or any combination of them.

To use sections, select "Option", then "Multiple sections". If that option is selected, the "Section" menu items and buttons will no longer be grayed. You will also be asked for section numbers for some of the operations.

If you have a class with multiple sections, and you turn off the "Multiple sections" option, only the first section will be visible to you. The others will not be deleted, however.

See also

[Passwords](#)

[Section names](#)

Terms used in printing

All terms used in printing and displaying data can be changed or translated. There are three places where you can change the terms. The main reason for letting you change the terms is for translating into other languages, but you may not like our term.

Most terms

- Select "Option" from the Main Menu.
- Select "Output terms" from the Option Menu.
- Select one or more of the different dialogs that have terms. They are grouped roughly according to function. Some terms are on more than one dialog.

Special terms

These are found on any screen that prints data. Each screen has its own dialogs, with any term found in that window available right there.

- Select "Output terms" from the window menu.
- In some cases, there is more than one dialog for that window. If so, select each option if needed.

Other terms

- You can also change the names of the months and days of the week. See the [dates tutorial](#).
- You can change the names of the attendance types on the attendance options menu. Select "Attendance", then "Options".

Importing data

Data can be imported into VGW from text files. The manual gives complete details on what types of data can be imported and how it should be formatted.

Importing comma and quote files

Comma and quote files are those where the fields are separated by commas, and the data is enclosed in quotes: "name", "id", "section", etc.

- Select "File" from the Main Menu.
- Select "Import" from the File menu.
- Select "Comma and quote" from the Import menu.
- Select a file. The List files of type box, at the bottom, can be used to select certain types of files like DOC and TXT files.
- The data is read into the program. See the manual for details on how to tell VGW what type of data is in each field.

Importing flat files

Flat files are plain text files that have data listed in columns. The columns are separated by spaces or tabs. Flat files separated by tabs import better than those separated by spaces, as names and titles usually have spaces in them, confusing the program. For these, then, it is best if you specify which columns have what data.

- Select "File" from the Main Menu.
- Select "Import" from the File menu.
- Select "Flat files" from the Import menu.
- Select a file. The List files of type box, at the bottom, can be used to select certain types of files like DOC and TXT files.
- You now select the types of data that are in the file. Use the mouse to check each different type of data in the file.
- If you "checked" database items, you are asked for the items in the file. If they are new items, type in new numbers for them. After each one, select "OK". When you have selected all that you want, click on "Done".
- If you "checked" tasks, you now select those. Again, new items can be added by selecting new numbers. After each one, select "OK". When have entered them all, select "Done".
- Next, you select the order of the data in the file. To do this, click on the items, in order, in the top list, then click on "Select". You can also double click to select the item.
- You next specify exactly where the columns are located. The item being specified is listed below the data. Click the left mouse button on the first and last columns of the item. Continue for all the data types in the file. You can use the scroll bars to move the data left or right. When you have specified all the positions, select "OK". You can back up or start over by clicking on the buttons on the bottom.
- The data is read into the program.

Other options

- When importing, you can specify whether to add new students or not. In most cases, you want the students added if they are not found. In some cases, you do not. This case occurs when you have a set of data, only some of which belong in the class. This option is set by selecting "File", "Import", then "Options" from the Main Menu.
- There are other ways to import. See the manual for more details.

Exporting data

Data from your class can be exported to text files, which can then be imported into other programs.

Exporting to comma and quote files

Comma and quote files are those where the fields are separated by commas, and the data is enclosed in quotes: "name", "id", "section", etc.

- Select "File" from the Main Menu.
- Select "Export" from the File menu.
- Select "Comma and quote" from the Import menu.
- Select the database items to export. To select them, click on the item, then click on "Select". You can also double click to select the item. When you have selected them all, select "OK".
- Select the tasks to export. To select them, click on the item, then click on "Select". You can also double click to select the item. When you have selected them all, select "OK".
- Select how the names and IDs should be exported.
- Select the export order. To select them, click each of the items, in order, then click on "Select". You can also double click to select the items. When you have selected them all, select "OK".
- Select a file. Although we recommend an extension of "TXT" (e.g., class.TXT), this is only because other programs prefer that extension.
- The data is written to the file.

Exporting to flat files

Flat files are plain text files that have data listed in columns. The columns can be separated by spaces or tabs. Flat files separated by tabs import better than those separated by spaces, as names and titles usually have spaces in them, confusing the program.

- Select "File" from the Main Menu.
- Select "Export" from the File menu.
- Select "Flat files" from the Import menu.
- Select whether to separate the data by tabs or spaces. If you are unsure, try tabs first and see if it works.
- Select the database items to export. To select them, click on the item, then click on "Select". You can also double click to select the item. When you have selected them all, select "OK".
- Select the tasks to export. To select them, click on the item, then click on "Select". You can also double click to select the item. When you have selected them all, select "OK".
- Select how the names and IDs should be exported.
- Select the export order. To select them, click each of the items, in order, then click on "Select". You can also double click to select the items. When you have selected them all, select "OK".
- Select a file. Although we recommend an extension of "TXT" (e.g., class.TXT), this is only because other programs prefer that extension.
- The data is written to the file.

Note: There are other ways to export. See the manual for details.

Scaling tasks

Student scores in number or extra credit tasks can have points added or subtracted, or the scores can be multiplied by a number. This is called scaling. Scaling can be done on individual sections of students. The main use of this is to adjust scores of one section compared to the others. Another way to adjust scores is to adjust statistics.

Scaling tasks

- Select "Grade" from the Main Menu.
- Select "Scale a task" from the Grade menu.
- Select a task. You do this by double clicking on the task, or by clicking on it and then clicking on the "Select" button. Select "OK".
- If there is more than one section of students in the class, select the sections to scale. You do this by clicking the left mouse button on the student name, then clicking on "Select". You can also double click on a name to select a section.
- You next pick whether to add, subtract, multiply, or divide the scores by a value. The value is added to the box in the center of the dialog. Select "OK" when you have chosen how to scale the scores.
- Scores that scale to more than the total points end up with the total points for the task, and students whose scores are unentered do not change at all.

Adjusting statistics

- Select "Grade" from the Main Menu.
- Select "Adjust task statistics" from the Grade menu.
- Select a task. You do this by double clicking on the task, or by clicking on it and then clicking on the "Select" button. Select "OK".
- You are now presented with the current mean, median, and standard deviation, as well as whether the scores have previously been adjusted. You now type in the new mean and standard deviation. The scores are adjusted by determining how far away from the mean the student score is, and making it equivalently away. For example, a student one standard deviation below the mean will be adjusted to still be one standard deviation below the mean. Since the mean and/or standard deviation will change, the score will change. To remove the adjustments and return to the "raw" score, select the "Remove Adjustment" button. This will scale the scores back. Because of rounding errors, the score may not be exactly the same as the true raw score.
- Select "OK".

Assigning statistics

Statistics for a task can be calculated and assigned to a number task. These are assigned on a one time basis, and are not continuously recalculated.

Calculating and assigning statistics

- Select "Grade" from the Main Menu.
- Select "Assign statistics values" from the Grade menu.
- Select the type of statistics to assign. The choices are **percentiles**, **z scores** (standard deviations), **T scores**, and **student t scores**. After selecting one option, select "OK".
- Select a task for calculating the values. You select a task by double clicking on the task, or by clicking on it and then clicking on the "Select" button. Select "OK".
- Select a task for assigning the values. This would probably be a new task, but you can choose an existing task. Enter the task number by typing it in, select an old task as described above, or select "Next free" to pick the next unused number for the new task.
- If the lowest statistical value is lower than the fewest allowed points, you will get a message asking whether to lower the value. If you do not lower the value, the low scores will be equivalent to excused scores (blank). If you select "Yes", you are then asked for the new low value. The lowest statistical value is suggested as the new low value.

What ifs

What ifs determine what scores a student needs to obtain any grade. The student needs to have unentered scores, or the grade has already been assigned.

Doing a what if

- Select "Grade" from the Main Menu.
- Select "What ifs" from the Attendance menu.
- Select a task for calculating the what ifs. The task must be a final task. You select a task by double clicking on the task, or by clicking on it and then clicking on the "Select" button. Select "OK".
- Select the student(s) to use. You select a student by double clicking on the name, or by clicking on it and then clicking on the "Select" button. Select "OK".
- If you haven't yet defined cutoffs for the grades, you then assign the cutoffs. See [grade cutoffs](#) for more assistance.
- The data is then shown. A variety of measures are shown: current points, total possible points, points left, and points tried (current total). Note that, for some tasks, the points tried and left are weighted points. Below are the possible grades and the scores needed by the student to obtain that grade. These scores are the average scores needed to obtain the grade. In some cases, such as when you discard a score, a student could get lower scores and still obtain the grade.
- To exit, select "File", then "Exit".

Changing the what if

- You can select "Task" to select a new final task to use for the calculations.
- You can select "Students" to select new students for analysis.
- You can select "Cutoffs" to change the current cutoffs.
- You can select "View" or "Output terms" to change the appearance of the results. View lets you specify how the name and ID are printed, while output terms lets you change all the titles and statistical terms.
- To print the results, select "File", then "Print". You can change the font by selecting "File", then "Font".

Adjusting grades

After assigning final grades, they can be adjusted. This allows you to make exceptions to the computer assigned grades.

Adjusting grades

- Select "Grade" from the Main Menu.
- Select "Adjust final grades" from the Grade menu.
- Select a final task. It must be a final task, as the other tasks do not need this type of adjusting. You select a task by double clicking on the task, or by clicking on it and then clicking on the "Select" button. Select "OK".
- You now see a window that looks identical to the Class Data Entry window. It has the list of students by name and/or ID, the section (if necessary), and two tasks. These are new tasks, one for the final task and one for the task used for the final task. You can now alter one or both columns.
- When you are finished altering the grades, select the "Exit" button.
- Two new tasks are defined, and are called "Adjusted x", where "x" are the old final task and the task used to assign final grades. The new adjusted final task is a letter task, while the other task is a number or letter task, depending upon the type of task used for the final task.

Sorting students

Students can be sorted by name, ID, section, database items, and task scores. The order is used on printouts and when entering data.

Storing

- Select "Option" from the Main Menu.
- Select "Sort order" from the Option menu.
- You can select sorting by name, ID, section, any database item, any task, no sorting, or randomizing. If there is more than one section of students, you can also sort by these items and sections (double sorting).
- If you selected database items or tasks, you need to select the item for sorting. To select the item, click on it, then click on "Select". You can also double click on the item. After selecting an item, click on "OK".

Passwords

Passwords can be added to each class to make your grades more secure. If you have more than one section of students, you can protect each section with a different password (plus one for the entire class that unlocks all sections). Note that passwords are not 100% secure. They reduce but don't eliminate unauthorized people from viewing the class.

Adding a class password

- Select "Option" from the Main Menu.
- Select "Password" from the Option menu.
- Enter the password. This password is required each time you load the class. You will also be asked to reenter the password, to make sure it was typed correctly.
- Select "OK".

Adding section passwords

A class password, described above, must be defined to use section passwords. The class password allows viewing and entry to all the sections of the class, while the section passwords allow editing and viewing of only that single section.

- Select "Option" from the Main Menu.
- Select "Password" from the Option menu.
- Click the left mouse button on the "Sections" button.
- Enter a password for each of the sections. If one isn't entered, the only access to it is through the class password. You will be asked to reenter each password to make sure it was typed correctly.
- Select "OK".

Printing report forms

You can print your data just about any way that you want by using report forms. A large number of examples have been included with the program.

Printing reports

- Select "Write" from the Main Menu.
- Select "Reports" from the Write menu.
- Select "Show a report" from the Report menu.
- Select a file to show. The ones included with the program have the extension FRM, for example, DB.FRM. If you wrote your own, it may have a different extension.
- Next, you are asked to select the students for the report. For some reports you want to select most or all the students ("class reports", such as Attend.FRM or Section.FRM). For others, you probably want to select one or two students ("individual reports", such as Progress.FRM or Whatif.FRM).
- The form is now shown. You can print it by selecting "File", then "Print".
- You can exit by selecting "File", then "Exit".

Printing frequently used reports

- Select "Write" from the Main Menu.
- Select "Reports" from the Write menu.
- Select one of the numbers at the bottom of the Reports menu. The name of the report is shown.

See also

Editing reports

Editing report forms

You can change the report forms included with the program, or write a completely new form. VGW includes a simple editor that can be used for editing the forms. You do not have to use the editor, but it has the advantage of automatically writing plain text files, while Microsoft Write, Word Perfect, or Microsoft Word prefer to write in their own format.

Editing reports

- Select "Write" from the Main Menu.
- Select "Reports" from the Write menu.
- Select "Edit a form" from the Report menu.
- Select the file that you want to change. For example, select "Elem.FRM".
- You are in a simple editor. Assuming you selected Elem.FRM, if you look at it, notice that there are a lot of square brackets ([and]). These are commands that tell VGW to insert data at that place. Each of these commands can insert a different type of data. The manual explains how all the commands work.
- To change the commands, just move to the field, then change it to a new command. You can change spacing, fonts, etc. You should look at the other sample forms to see how various printing is accomplished.
- When you are finished, save the file by selecting "File", and then "Save" or "Save as".
- You exit by selecting "File", then "Exit".

Example

- Select the Elem.FRM, as described above.
- This form prints the first and last grades from several classes. However, the classes and grades are written into the form. To use them in your classes, you need to do the following:
 - Move to line 14 (the line numbers are shown at the bottom), it starts "[Class=][ClassName:25][DTask@1]".
 - [DTask@1] says to print the first task. To change it to another task, change the "1" to another number.
 - On the same line, the command "[DTask"Final Grade"] [TaskScore:15]" is seen. This prints the first task that has "Final Grade" in its name (it's not case sensitive). If you change it to "Midterm", it will print the first task that has Midterm in the name.
 - Lines 15, 17, and 19 start with "[Class=Sample]", where "Sample" is SampleB, SampleC, or SampleD. You need to make the same two changes to the task commands as you made on line 14. In addition, you need to change the Sample classes to your classes. For example, change "Class=SampleB" to "Class=Eng111". The name should be the disk file name of the class, and can include a path statement ("Class=c:").
 - Save the file by selecting "File", then "Save as". Enter a new name, such as "MyElem.frm".
- To view the file, from the Main Menu select "File", then "Reports", then "Show a form".

See also

Printing reports

Subjects

Subjects are different classes. They let you print data from several classes onto one report. Once you specify them in any of several parts of the program, they are used for the others, as well.

Designating subjects

- Select "Write" from the Main Menu.
- Select either "by Section or class" or "by Name" from the Write menu.
- Select "Extra subjects or classes" from the menu.
- You can now enter up to 10 subjects. These are in addition to the current class. When printing, they are printed in order, with the current class printed first, then the first subject, and so forth.
 - To add a subject, you first move to an edit field. You then either type in the class file name (including the path, if necessary), or select "Add new subject". If you type in the name, "C:" is a valid name, as is "samplea" if you start the program in the c:directory. When adding a new subject, the button pops up the Open class dialog, and lets you select the class. The name is then inserted into the next available edit field.
 - The "Replace subject" button acts like the "Add new subject" button, but that the current edit field is replaced with the new file name.
 - You can delete a subject by either clearing the field so that it is blank, or moving to it and selecting "Remove subject".
 - When you are finished, select "OK".
- When you print, these classes are used for printing. In some cases, you will be asked to specify a list of items to print from each of the classes.

Number tasks

To define a number task:

- Select "Task" from the Main Menu.
- Select "Define" from the Task menu.
- Select "Number" from the Define task menu.
- Select a task number. The number can be from 1 to 10000, and the numbers don't need to be consecutive. It is frequently useful to group types of grades by numbers, so that 1 through 20 are quizzes, 21 through 40 are homework assignments, etc. To select the number, either type in the number, or use the "select" or "next free" buttons. The select button picks the number of the highlighted task, and the next free button uses the next empty number.
- Enter the task name and the total points for the task. The total points are used in grade calculations and in checking grades entered by typing.
- Select the "Done" button. If you are defining several letter tasks, you can select the "Add more" button.
- If the task number you selected already exists, you are asked whether to replace or to insert the new task before the old one. If you select "insert", the old task will have its number increased by one. If you select "replace", the old task will be discarded, and a new one added.

If you replace a task, you are asked if the grades should be deleted. Saying "no" will retain the old grades. Therefore, you can change the total points of a task by "replacing" it, and not deleting the old grades.

Letter tasks

To define a letter task:

- Select "Task" from the Main Menu.
- Select "Define" from the Task menu.
- Select "Letter" from the Define task menu.
- Select a task number. The number can be from 1 to 10000, and the numbers don't need to be consecutive. It is frequently useful to group types of grades by numbers, so that 1 through 20 are quizzes, 21 through 40 are homework assignments, etc. To select the number, either type in the number, or use the "select" or "next free" buttons. The select button picks the number of the highlighted task, and the next free button uses the next empty number.
- Enter the task name.
- Select the "Done" button. If you are defining several letter tasks, you can select the "Add more" button.
- If the task number you selected already exists, you are asked whether to replace or to insert the new task before the old one. If you select "insert", the old task will have its number increased by one. If you select "replace", the old task will be discarded, and a new one added.

Extra credit tasks

To define an extra credit task:

- Select "Task" from the Main Menu.
- Select "Define" from the Task menu.
- Select "Extra credit" from the Define task menu.
- Select a task number. The number can be from 1 to 10000, and the numbers don't need to be consecutive. It is frequently useful to group types of grades by numbers, so that 1 through 20 are quizzes, 21 through 40 are homework assignments, etc. To select the number, either type in the number, or use the "select" or "next free" buttons. The select button picks the number of the highlighted task, and the next free button uses the next empty number.
- Enter the task name and the total points for the task. The total points are used only when checking grades entered by typing.
- Select the "Done" button.
- If the task number you selected already exists, you are asked whether to replace or to insert the new task before the old one. If you select "insert", the old task will have it's number increased by one. If you select "replace", the old task will be discarded, and a new one added.

If you replace a task, you are asked if the grades should be deleted. Saying "no" will retain the old grades. Therefore, you can change the total points of a task by "replacing" it, and not deleting the old grades.

Sum tasks

To define a sum task:

- Select "Task" from the Main Menu.
- Select "Define" from the Task menu.
- Select "Sum" from the Define task menu.
- Select a task number. The number can be from 1 to 10000, and the numbers don't need to be consecutive. It is frequently useful to group types of grades by numbers, so that 1 through 20 are quizzes, 21 through 40 are homework assignments, etc. To select the number, either type in the number, or use the "select" or "next free" buttons. The select button picks the number of the highlighted task, and the next free button uses the next empty number.
- Enter the task name.
- Select the tasks to add up. You can select them by double clicking on the task, by single clicking and then clicking on the "select" button, or, if you want to use all of them, by clicking on the "select all" button. This button will select all the currently defined tasks. To select tasks that might be defined in the future, select "Type numbers", then enter the tasks that you want to use. For example, if you define the sum task as number 51, you can type in "1:50" to sum any tasks that might be defined in the future.
- If the task number you selected already exists, you are asked whether to replace or to insert the new task before the old one. If you select "insert", the old task will have its number increased by one. If you select "replace", the old task will be discarded, and a new one added.

Average tasks

To define an average task:

- Select "Task" from the Main Menu.
- Select "Define" from the Task menu.
- Select "Average" from the Define task menu.
- Select a task number. The number can be from 1 to 10000, and the numbers don't need to be consecutive. It is frequently useful to group types of grades by numbers, so that 1 through 20 are quizzes, 21 through 40 are homework assignments, etc. To select the number, either type in the number, or use the "select" or "next free" buttons. The select button picks the number of the highlighted task, and the next free button uses the next empty number.
- Enter the task name.
- Select the tasks to average. You can select them by double clicking on the task, by single clicking and then clicking on the "select" button, or, if you want to use all of them, by clicking on the "select all" button. This button will select all the currently defined tasks. To select tasks that might be defined in the future, select "Type numbers", then enter the tasks that you want to use. For example, if you define the average task as number 51, you can type in "1:50" to average any tasks that might be defined in the future.
- If the task number you selected already exists, you are asked whether to replace or to insert the new task before the old one. If you select "insert", the old task will have it's number increased by one. If you select "replace", the old task will be discarded, and a new one added.

Percentage tasks

To define a percentage task:

- Select "Task" from the Main Menu.
- Select "Define" from the Task menu.
- Select "Percentage" from the Define task menu.
- Select a task number. The number can be from 1 to 10000, and the numbers don't need to be consecutive. It is frequently useful to group types of grades by numbers, so that 1 through 20 are quizzes, 21 through 40 are homework assignments, etc. To select the number, either type in the number, or use the "select" or "next free" buttons. The select button picks the number of the highlighted task, and the next free button uses the next empty number.
- Enter the task name.
- Select the tasks use for calculating the percentage. You can select them by double clicking on the task, by single clicking and then clicking on the "select" button, or, if you want to use all of them, by clicking on the "select all" button. This button will select all the currently defined tasks. To select tasks that might be defined in the future, select "Type numbers", then enter the tasks that you want to use. For example, if you define the percentage task as number 51, you can type in "1:50" to use any tasks that might be defined in the future.
- If the task number you selected already exists, you are asked whether to replace or to insert the new task before the old one. If you select "insert", the old task will have it's number increased by one. If you select "replace", the old task will be discarded, and a new one added.

Highest tasks

Highest tasks discard the lowest one or more scores from a group of tasks.

To define a highest task:

- Select "Task" from the Main Menu.
- Select "Define" from the Task menu.
- Select "High" from the Define task menu.
- Select a task number. The number can be from 1 to 10000, and the numbers don't need to be consecutive. It is frequently useful to group types of grades by numbers, so that 1 through 20 are quizzes, 21 through 40 are homework assignments, etc. To select the number, either type in the number, or use the "select" or "next free" buttons. The select button picks the number of the highlighted task, and the next free button uses the next empty number.
- Enter the task name, the number to discard, and the type of calculation. You can discard up to one fewer than the number of tasks that you select to use. The type of calculation affects whether the tasks are summed, averaged, or a percentage is calculated.
- Select the tasks to add up. You can select them by double clicking on the task, by single clicking and then clicking on the "select" button, or, if you want to use all of them, by clicking on the "select all" button. This button will select all the currently defined tasks. To select tasks that might be defined in the future, select "Type numbers", then enter the tasks that you want to use. For example, if you define the high task as number 51, you can type in "1:50" to use any tasks that might be defined in the future.
- If the task number you selected already exists, you are asked whether to replace or to insert the new task before the old one. If you select "insert", the old task will have its number increased by one. If you select "replace", the old task will be discarded, and a new one added.

Weight tasks

To define a weight task:

- Select "Task" from the Main Menu.
- Select "Define" from the Task menu.
- Select "Weight" from the Define task menu.
- Select a task number. The number can be from 1 to 10000, and the numbers don't need to be consecutive. It is frequently useful to group types of grades by numbers, so that 1 through 20 are quizzes, 21 through 40 are homework assignments, etc. To select the number, either type in the number, or use the "select" or "next free" buttons. The select button picks the number of the highlighted task, and the next free button uses the next empty number.
- Enter the task name, the number to discard, and the total points. The weight task calculates weights for you, adjusting them so that the total points is what you specify. In most cases, you want a total of 100 points. If you discard tasks, the weight of the others are adjusted accordingly.
- Select the tasks to weight. You can select them by double clicking on the task, by single clicking and then clicking on the "select" button, or, if you want to use all of them, by clicking on the "select all" button.
- Enter the relative weights. If you want exams to count 30%, homework to count 50%, and participation to count 20%, you would enter weights of 30 for the homework task, 50 for the homework task, and 20 for the participation task. VGW then adjusts the weights so that they make the total points come out correctly. In other words, you do not have to hand calculate the weights! If all the weights are the same, it is equivalent to averaging the tasks. When you have entered all the weights, select "OK".
- If the task number you selected already exists, you are asked whether to replace or to insert the new task before the old one. If you select "insert", the old task will have its number increased by one. If you select "replace", the old task will be discarded, and a new one added.

If tasks

To define an if task:

- Select "Task" from the Main Menu.
- Select "Define" from the Task menu.
- Select "If" from the Define task menu.
- Select a task number. The number can be from 1 to 10000, and the numbers don't need to be consecutive. It is frequently useful to group types of grades by numbers, so that 1 through 20 are quizzes, 21 through 40 are homework assignments, etc. To select the number, either type in the number, or use the "select" or "next free" buttons. The select button picks the number of the highlighted task, and the next free button uses the next empty number.
- Enter the task name.
- Select the task to use for checking grade values. If tasks check the values, then "pass" only those that meet the criteria. A "not pass" is a 0 score.
- Enter the criteria. You can select any of the five categories (less than, less than and equal, equal, equal to and greater, and greater). Also enter a value. To have the if task pass scores greater than or equal to 80, you click the left mouse button on "greater that or equal to a value", and enter the number 80 for the criteria value. Scores less than 80 will come out as a 0.
- If the task number you selected already exists, you are asked whether to replace or to insert the new task before the old one. If you select "insert", the old task will have it's number increased by one. If you select "replace", the old task will be discarded, and a new one added.

User tasks

To define a user task:

- Select "Task" from the Main Menu.
- Select "Define" from the Task menu.
- Select "User" from the Define task menu.
- Select a task number. The number can be from 1 to 10000, and the numbers don't need to be consecutive. It is frequently useful to group types of grades by numbers, so that 1 through 20 are quizzes, 21 through 40 are homework assignments, etc. To select the number, either type in the number, or use the "select" or "next free" buttons. The select button picks the number of the highlighted task, and the next free button uses the next empty number.
- Enter the task name.
- Enter the task definition. You enter tasks with the task number in square brackets: [5] is the score on task #5. You can enter the four mathematical symbols, and use parentheses to indicate calculations that should be done first. To use a percentage of a task score, add the percent before the task number: [%5] is the percentage of score 5. The calculations are done first in the parentheses, and then left to right. To average tasks 3 and 4, enter $([3]+[4])/2$ or $[3]+[4]/2$. If you click on a task, it adds it to the definition. If you click on a mathematical operation or a parenthesis, it is added. You can therefore define most user tasks with just the mouse.
- If the task number you selected already exists, you are asked whether to replace or to insert the new task before the old one. If you select "insert", the old task will have its number increased by one. If you select "replace", the old task will be discarded, and a new one added.

Final tasks

Final tasks use grade cutoffs to assign grades. They use the scores of another task, check the cutoffs, and determine the grade.

To define a final task:

- Select "Task" from the Main Menu.
- Select "Define" from the Task menu.
- Select "Final" from the Define task menu.
- If you haven't defined any grade cutoffs, you can do so now. The final task uses grade cutoffs to assign grades. If you don't assign cutoffs now, all students will have the highest or lowest grades. You can later assign grades to this task, so they won't always have the highest or lowest grades. See **Grade cutoffs** for assigning cutoffs, and **Assigning final grades** for assigning cutoffs after the task has been defined.
- Select a task number. The number can be from 1 to 10000, and the numbers don't need to be consecutive. It is frequently useful to group types of grades by numbers, so that 1 through 20 are quizzes, 21 through 40 are homework assignments, etc. To select the number, either type in the number, or use the "select" or "next free" buttons. The select button picks the number of the highlighted task, and the next free button uses the next empty number.
- Enter the task name.
- Select the task that will be used for assigning grades. This is the task that the grade cutoffs are applied to.
- If the task number you selected already exists, you are asked whether to replace or to insert the new task before the old one. If you select "insert", the old task will have its number increased by one. If you select "replace", the old task will be discarded, and a new one added.

Attendance tasks

To define an attendance task:

- Select "Task" from the Main Menu.
- Select "Define" from the Task menu.
- Select "Attendance" from the Define task menu.
- Select a task number. The number can be from 1 to 10000, and the numbers don't need to be consecutive. It is frequently useful to group types of grades by numbers, so that 1 through 20 are quizzes, 21 through 40 are homework assignments, etc. To select the number, either type in the number, or use the "select" or "next free" buttons. The select button picks the number of the highlighted task, and the next free button uses the next empty number.
- Enter the task name, total points, and how many attendance days to discard. You can discard up to one fewer than the days used for the calculations. The total points is the points you wish the best attendance to be.
- Select the attendance days to use. You can select them by double clicking on the task, by single clicking and then clicking on the "select" button, or, if you want to use all of them, by clicking on the "select all" button.
- Enter the attendance type values. Each attendance type can have a different value. Note that these are the relative values, as the task scales the scores to the total points you entered. The proposed values are values that can be set by selecting "Attendance", then "Values" from the Main Menu.
- If the task number you selected already exists, you are asked whether to replace or to insert the new task before the old one. If you select "insert", the old task will have it's number increased by one. If you select "replace", the old task will be discarded, and a new one added.

Attendance extra credit tasks

To define an attendance extra credit task:

- Select "Task" from the Main Menu.
- Select "Define" from the Task menu.
- Select "Attendance extra credit" from the Define task menu.
- Select a task number. The number can be from 1 to 10000, and the numbers don't need to be consecutive. It is frequently useful to group types of grades by numbers, so that 1 through 20 are quizzes, 21 through 40 are homework assignments, etc. To select the number, either type in the number, or use the "select" or "next free" buttons. The select button picks the number of the highlighted task, and the next free button uses the next empty number.
- Enter the task name, total points, and how many attendance days to discard. You can discard up to one fewer than the days used for the calculations. The total points is the points you wish the best attendance to be. Like extra credit tasks, the total points of attendance extra credit tasks is not used in calculations. The total points are used only for scaling the scores.
- Select the attendance days to use. You can select them by double clicking on the task, by single clicking and then clicking on the "select" button, or, if you want to use all of them, by clicking on the "select all" button.
- Enter the attendance type values. Each attendance type can have a different value. Note that these are the relative values, as the task scales the scores to the total points you entered. The proposed values are values that can be set by selecting "Attendance", then "Values" from the Main Menu.
- If the task number you selected already exists, you are asked whether to replace or to insert the new task before the old one. If you select "insert", the old task will have it's number increased by one. If you select "replace", the old task will be discarded, and a new one added.

Attendance total tasks

To define an attendance total task:

- Select "Task" from the Main Menu.
- Select "Define" from the Task menu.
- Select "Attendance extra credit" from the Define task menu.
- Select a task number. The number can be from 1 to 10000, and the numbers don't need to be consecutive. It is frequently useful to group types of grades by numbers, so that 1 through 20 are quizzes, 21 through 40 are homework assignments, etc. To select the number, either type in the number, or use the "select" or "next free" buttons. The select button picks the number of the highlighted task, and the next free button uses the next empty number.
- Enter the task name.
- Enter the types of attendance to use for the calculations. The calculations are done on every attendance day. The total for the task is the number of attendance days.
- If the task number you selected already exists, you are asked whether to replace or to insert the new task before the old one. If you select "insert", the old task will have its number increased by one. If you select "replace", the old task will be discarded, and a new one added.

Defining attendance

There are two ways to define attendance days. One allows you to define many days at once, while the other lets you define single days. Note that attendance can be kept for up to 240 different days. You can redefine or change the characters that specify attendance by selecting "Attendance" from the Main Menu, then "Options".

Defining many attendance days

- Select "Attendance" from the Main Menu.
- Select "Define dates" from the Attendance menu.
- Select the days of the week the class is held by clicking the left mouse button on the day. Days that are "checked" are the days the class is held.
- Two calendars are shown. The left calendar is the first day of the grading period, while the right calendar is the last day. You select a day by clicking the left mouse button on it. When you select a day, that date is shown below in the date format that is used to name the days. If you don't like the date style, select "Cancel", then change the style as described in the [date tutorial](#). Moving the scroll bar on the calendar moves the month or year. Every day between your starting and ending date on the days of the week your class is held is defined as an attendance day. When you have selected both the starting and ending date, select "OK".
- If there are holidays or other days off from class, you should then remove those days. See "Removing days" below.

Defining single attendance days

- Select "Attendance" from the Main Menu.
- Select "Insert one date" from the Attendance menu.
- Enter the number of the day to define. You do this by one of the following: typing in a number; using the left mouse button to select a day, then clicking on the "Select" button; or, clicking on the "Next free" button. The last option selects the next free day.
- You then use a calendar to select the day. Click the left mouse button on the day. To move to a different month or year, click on the scroller at the bottom of the calendar.
- After you have selected a day, you can, if desired, change the name by clicking on the field where the name is shown, then using the , <Backspace>, and other keys to edit the name.
- When you have selected the day, click on "OK".

Removing days

- Select "Attendance" from the Main Menu.
- Select "Remove dates" from the Attendance menu.
- Select the dates to remove by double clicking on the date or by clicking on the date, then clicking on the "Select" button. To remove all the dates, click on the "Select all" button. The date to remove is moved to the bottom list. To move a date back up to the top list, click on the date on the bottom list, then click on the "Reject" button. You can also double click on the date to move it, or select the "Reject all" button.
- When the dates have been selected, click on the "OK" button.

Dates

The format for the dates can be changed. Dates can include the day of the week, the name of the month, or just numbers.

Defining date styles or formats

- Select "Option" from the Main Menu.
- Select "Date format" from the Option Menu.
- Select one of the date styles. In some cases, there are two styles that appear the same. This happens if the day of the month is from 1 to 9. In those cases, the first style always uses two numbers for a day, while the second one does not. For example, 9/04/94. The second style does not use a leading zero, so the same date would appear 9/4/94.
- If you select "Your own date format", you can describe how you want the format to appear. More details of how to do this are in the manual.

Changing date names

- Select "Option" from the Main Menu.
- Select "Date names" from the Option Menu.
- There are four standard languages where the dates are already defined: English, French, German, and Spanish. If you use a different language, select "Other language". Then select "OK".
- If you selected "Other language", a list of the 12 months and 7 days of the week are shown. You move to each weekday or month and enter the new name. When you are finished, select "OK".

Class and section names

Printouts show the name of the class and/or the name of the section displayed. In addition, you can add your own name as the instructor.

Teacher name

- Select "Write" from the Main Menu.
- Select "Teacher name" from the Write menu.
- Enter your name.

Each class keeps its own instructor's name. However, it inherits the name from the previous time you defined it. In other words, if you enter your name, all future classes inherit the name until you change it.

Class name

When you make a new class, the file name is the one the program selects for the class. In many cases, you want to change this.

- Select "Write" from the Main Menu.
- Select "Class name for printouts" from the Write menu.
- Enter the name of the class.

Section names

The default names for sections are "Section x", where x is the section number. If you enter a new name, that takes precedence over the default.

- Select "Write" from the Main Menu.
- Select "Section names or comments" from the Write menu.
- For each section in the class, enter the name. SampleD class has example names added. For example, "Section 1: M 8:00-8:50 AM". Another example might be "English, period 3".

Defining a task

Tasks are used for grades and for doing calculations on grades. There are two types of tasks: those which you enter data into (regular tasks), and those that calculate grades using other tasks (special tasks). Since each task is defined a little differently, click on the type of task you want to define.

Regular Tasks

Note: The two major types of tasks are letter and number tasks.

- Number:** Number tasks are ones where you enter number grades.
Letter: Letter tasks are ones where you use letters for grades, e.g., "A" and "F".
Extra credit: These are number tasks that are treated as having 0 total points for calculations.

Special Tasks

- Sum:** These add up the scores of other tasks.
Average: These average the scores of other tasks.
Percentage: These calculate the percentage of total points earned in other tasks.
Highest: These discard one or more tasks, then sum, average, or calculate the percentage of them.
Weight: These let you determine what proportion of a grade should be due to each of one or more tasks.
If: These require a certain score to pass a score.
User: These let you define a task similar to a spreadsheet.
Attendance: These let you use attendance in calculating grades.
Attendance total: These add up various types of attendance.
Attendance extra credit: These are attendance tasks, but are like extra credit tasks in that they are worth 0 total points for calculations.
Final: These use grade cutoffs to assign final grades.

New classes

To orient you a little about **VAR Grade for Windows (VGW)**, this program can do grades, attendance, and seating charts. In addition, it can hold database items for other student data.

To make VGW as flexible as possible, you need to define how the program should work. For example, we don't give you a list of tasks for grades, and average them automatically. If you want the program to do this, you need to tell it. This means it may take you a little longer to set up your class than a simpler and less capable program, but the ultimate reward is that you can grade your class any way you want. Just about any grading system or method can be accommodated by the program.

You can do a myriad of statistical calculations and a wide variety of different plots that are customizable. We believe that you should not only grade your classes, but should also analyze them. By analyzing the grades, you can determine where students are succeeding and where they are failing, and thereby improve your teaching.

We also give you the capability to print your data just about any way you could want, as not only do we have a multitude of reports available in the program, you can also write reports that we haven't thought of by using special codes in text files.

In short, this is a very powerful, capable, and flexible program.

Making a new class

- Select "File" from the **Main Menu**.
- Select "New" from the File menu.

You now have a new class. Described below are several things you should do before entering students, tasks, or attendance.

Getting the class ready for data

- Check the grading system. It's easiest if you define a new grading system before you enter data. See grading systems.
- If you always use the same grade cutoffs, enter them. See grade cutoffs.
- Change the class name and instructor's name. See class and section names.
- If this is the first time you've used **VAR Grade for Windows** and use attendance, select "Attendance", then "Options". Check the names of the attendance types and the keys used for the values, and change them if they are different than what you need.
- If you want printouts to use a different language than English, you can change the terms used in printouts. See terms on printouts.
- If you use VGW where students may have access to your computer, you should use passwords. See passwords.

It doesn't matter whether you enter tasks, attendance, or students first into the program. However, you must define tasks before you can enter grades, and you must define attendance days before you enter attendance. The tutorials on defining grades and attendance will help you set up your class.

Score totals

If you want to sum or average all your grades, the following tutorial explains how to do this.

- Select "Task" from the Main Menu.
- Select "Define" from the Task menu.
- Select "Average" or "Sum" from the Define task menu.
- Select a task number. It is best to select a high number, like 100 or 1000. This way, you can insert new tasks with lower numbers. To select the number, type in the number.
- Enter the task name (e.g., "Class Sum" or "Class Average").
- Select the tasks to sum or average. You can select them by double clicking on each task, by single clicking on each task and then clicking on the "select" button, or, if you want to use all of them, by clicking on the "select all" button. This button will select all the currently defined tasks. To select tasks that might be defined in the future, select "Type numbers", then enter the tasks that you want to use. For example, if you define an average task as number 51, you can type in "1:50" to average any tasks that might be defined in the future.

If you want to assign grades, using the sum or average, go to **Final tasks**.

The menu at the top of the program when you first enter VGW.

Space for entering data. Each cell is used to enter a type of data.

Items for a student other than grades and attendance. They include addresses, gender, age, year in school, etc.

Tasks are not only assignments, but also are procedures that manipulate grades. For example, one type of task averages grades, while another type weights grades.

The number compares student scores, and is the percent of other students that did worse than this student. The values therefore range from 0 to 99.

z-scores are how many standard deviations the student is away from the mean. For a normal distribution, approximately two-thirds of the scores would be between +1 and -1.

These are z-scores that are adjusted so that the new mean is 50, and the standard deviation is 10.

These are a measure of how far a student is away from the mean of the class, and are therefore similar to z-scores. However, they are calculated a little differently and are better for small class sizes. They rely on "sampling" the scores.

A number that is calculated by adding all the student scores and dividing by the number of students.

The score of the middle score in the class. Half of the scores are above this value and half are below it.

A measure of how far a student is from the mean of the class. For a normal distribution, approximately two-thirds of the students are within one standard deviation of the mean (values of +1 to -1).

